

Attachment 1 - ARARs for Groundwater Remediation

No.	Source	Standard, Requirement, Criterion, or Limitation	Description	Why this is relevant to IR Site 12
1	Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.)	California Water Code Section 13304.1(a)	A groundwater cleanup system that is required to obtain a discharge permit from the RWQCB and that discharges treated groundwater to surface water or groundwater, shall treat the groundwater to standards approved by the RWQCB, taking into account the beneficial uses of the receiving water that the location of the discharge and the method by which the discharge takes place.	Applies to any discharge of treated groundwater that 1) are made to a surface water body or to land where groundwater could be affected and 2) for which the RWQCB has issued a discharge permit (e.g., an NPDES permit or Waste Discharge Requirements).
		California Water Code Section 13307.1(c)	If the SWRCB or RWQCB finds that the property is not suitable for unrestricted use and that a land use restriction is necessary for the protection of public health, safety, or the environment, then the SWRCB and the RWQCBs may not issue a closure letter, or make a determination that no further action is required, with respect to a site that is subject to a cleanup or abatement order pursuant to Section 13304 and that is not an underground storage tank site, unless a land use restriction is recorded or required to be recorded pursuant to Section 1471 or the Civil Code.	Applies to any site that is subject to a cleanup or abatement order pursuant to Section 13304 and that is not an underground storage tank site.
		California Water Code Section 13243	The RWQCB may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted.	Applies to groundwater remedial actions.
2	Porter-Cologne Water Quality Control Act (California Water Code Section 13000, 13304, 13240, 13241, 13242, 13243)	RWQCB-SFB Basin Plan Chapter 2 – Beneficial Uses	Chapter 2 describes beneficial uses of surface and ground waters.	Applies to all groundwater cleanups. Surface water beneficial uses may influence groundwater cleanup goals and/or treated effluent standards.

March 21, 2013

Attachment 1 - ARARs for Groundwater Remediation

No.	Source	Standard, Requirement, Criterion, or Limitation	Description	Why this is relevant to IR Site 12
		RWQCB-SFB Basin Plan Chapter 3 – Water Quality Objectives	Chapter 3 establishes water quality objectives, including narrative and numerical standards that protect the beneficial uses and water quality objectives of surface and ground waters in the region. Narrative objectives describe the water quality to attain via pollution control and form the basis for the numerical values. Numerical objectives are designed to limit the adverse effects of pollutants.	Applies where effluent is discharged to surface water or where groundwater discharges to surface water. Any activity, including, but not limited to the discharge of contaminated soils or water or in-situ treatment or containment of contaminated soils or waters, must not result in actual water quality exceeding water quality objectives.
		RWQCB-SFB Basin Plan. Chapter 4 – Implementation Plan	Chapter 4 describes implementation plans and other control measures designed to ensure compliance with statewide plans and policies. Includes groundwater and surface water protection and management. Describes program goals, how water quality objectives area applied, and strategies for managing polluted sites.	States that groundwater cleanup levels are established based upon the most sensitive beneficial use identified and that groundwater cleanup levels will be to background unless groundwater cleanup levels can be established based upon acceptable health risks. Requires groundwater monitoring to verify that groundwater is not polluted by chemicals remaining in soil.
3	Porter-Cologne Water Quality Control Act (California Water Code Sections 13000, 13140, 13263, 13304)	SWRCB Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality Waters in California ("Anti-degradation Policy").	Requires that high quality surface and groundwater be maintained to the maximum extent possible. Establishes policy that whenever the existing water quality is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated that any change will be consistent with the maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water, and will not result in water quality less than prescribed in the policies. Discharge or proposed discharges to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that a pollution or nuisance will not occur and	Applies to discharges of waste to waters, including discharges to soil that may affect surface or ground waters. If degradation of waters is allowed, or allowed to remain, the discharge must meet best practical treatment or control standards, and result in the highest water quality possible that is consistent with the maximum benefit to the people of the State. In-situ cleanup levels for contaminated ground waters must be set at background level, unless allowing continued

Attachment 1 - ARARs for Groundwater Remediation

No.	Source	Standard, Requirement, Criterion, or Limitation	Description	Why this is relevant to IR Site 12
			the highest water quality consistent with the maximum benefit to the people of the State will be maintained.	degradation is consistent with the maximum benefit of the people of the state.
4	Porter-Cologne Water Quality Control Act (California Water Code Sections 13240, 13241, 13242, 13243)	RWQCB-SFB Basin Plan, "Discharge of Treated Groundwater;" RWQCB Resolution No. 88-160.	Encourages that discharges of extracted groundwater from groundwater cleanup projects be reclaimed to the extent technologically and economically feasible, and if not technologically and economically feasible, to discharge to POTWs. Where neither option is feasible, the discharge shall be done in accordance with any NPDES requirements issued by the RWQCB.	Applicable to all groundwater sites where groundwater extraction occurs. NPDES permitting requirements identified by the resolution are procedural and not ARARs.
5	Porter-Cologne Water Quality Control Act (California Water Code Sections 13000, 13140, 13240)	SWRCB Resolution No. 88-63 ("Sources of Drinking Water Policy"), as contained in the RWQCB's Water Quality Control Plan	Specifies that, with certain exceptions, all ground and surface waters must have the beneficial use of municipal or domestic water supply. SWRCB Resolution 88-63 applies to all sites that may be affected by discharges of waste to groundwater or surface water. The resolution specifies that, with certain exceptions, all groundwater and surface waters have beneficial uses of municipal or domestic water supply. These exceptions include, among others, if: 1) the total dissolved solids exceed a 3,000 milligrams per liter or 2) the water source does not provide sufficient water to supply as single well capable of producing and average sustained yield of 200 gallons per day.	Applies in determining beneficial uses for waters that may be affected by discharges of waste.
6	Porter-Cologne Water Quality Control Act (California Water Code Sections 13000, 13140, 13240, 13260, 13263, 13267, 13300, 13304, 13307)	SWRCB Resolution No. 92-49, (Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304"), as amended April 21, 1994.	Establishes requirements for investigation and cleanup and abatement of discharges. Among other requirements, dischargers must clean up and abate the effects of discharges in a manner that promotes the attainment of either background water quality, or the best water quality that is reasonable if background water quality cannot be restored. Requires the application of Title 23, CCR, Section 2550.4, requirements to cleanups.	Applies to groundwater remedial actions. Applies to all cleanups where the quality of groundwater or surface water is threatened.

March 21, 2013

Attachment 1 - ARARs for Groundwater Remediation

No.	Source	Standard, Requirement, Criterion, or Limitation	Description	Why this is relevant to IR Site 12
7	Porter-Cologne Water Quality Control Act (California Water Code Sections 13140-13147, 13172, 13260, 13263, 13267, 13304)	Title 27, CCR, Division 2, Subdivision 1 (Section 20080 et seq.) Title 23, CCR, Division 3, Chapter 15 (Section 2510 et seq.).	Establishes waste and siting classification systems and minimum waste management standards for discharges of waste to land for treatment, storage, and disposal. Engineered alternatives that are consistent with Title 27/Title 23 performance goals may be considered. Establishes corrective action requirements for responding to discharges to land, including spills and leaks and other unauthorized discharges.	The application of specific sections of Title 27/ Title 23 is discussed below. Provisions of Title 23 apply to hazardous waste and provisions of Title 27 apply to designated and nonhazardous solid waste.
8	Porter-Cologne Water Quality Control Act (California Water Code Sections 13140-13147, 13172, 13260, 13263, 13267, 13304)	Title 27, CCR, Section 20090(d) Title 23, CCR, Section 2511 (d)	Action taken by public agencies to clean up unauthorized releases are exempt from Title 27/ Title 23 except that wastes removed from immediate place of release and discharged to land must be managed in accordance with classification (Title 27, CCR, Section 20200/ Title 23, CCR, Section 2520) and siting requirements of Title 27 or Title 23 and wastes contained or left in place must comply with Title 27 or Title 23 to the extent feasible.	Applies to remediation and monitoring of sites.
9	Porter-Cologne Water Quality Control Act (California Water Code Sections 13140-13147, 13172, 13260, 13263, 13267, 13304)	Title 27, CCR, Section 20400 Title 23, CCR, Section 2550.4.	Concentration limits must be established for groundwater, surface water, and the unsaturated zone. Must be based on background, equal to background, or for corrective actions, may be greater than background, not to exceed the lower of the applicable water quality objective or the concentration technologically or economically achievable. Specific factors must be considered in setting cleanup standards above background levels.	Applies in setting ground water cleanup levels for all discharges of waste to land.
10	Porter-Cologne Water Quality Control Act (California Water Code Sections 13140-13147, 13172, 13260, 13263, 13267, 13304)	Title 27, CCR, Section 20410 Title 23, CCR, Section 2550.6	Requires monitoring for compliance with remedial action objectives for three years from the date of achieving cleanup standards.	Applies to groundwater remedial actions.

Attachment 1 - ARARs for Groundwater Remediation

No.	Source	Standard, Requirement, Criterion, or Limitation	Description	Why this is relevant to IR Site 12
11	Porter-Cologne Water Quality Control Act (California Water Code Sections 13140-13147, 13172, 13260, 13263, 13267, 13304)	Title 27, CCR, Section 20415 Title 23, CCR, Section 2550.7.	Requires general soil, surface water, and ground water monitoring.	Applies to all areas at which waste has been discharged to land.
12	Porter-Cologne Water Quality Control Act (California Water Code Sections 13140-13147, 13172, 13260, 13263, 13267, 13304)	Title, 27, CCR, Section 20425 Title, 23, CCR, Section 2550.9.	Requires an assessment of the nature and extent of the release, including a determination of the spatial distribution and concentration of each constituent.	Applies to areas at which monitoring results show statistically significant evidence of a release.
13	Porter-Cologne Water Quality Control Act (California Water Code Sections 13140-13147, 13172, 13260, 13263, 13267, 13304)	Title 27, CCR, Section 20430 Title 23, CCR Section 2550.10	Requires implementation of corrective action measures that ensure that cleanup levels are achieved throughout the zone affected by the release by removing the waste constituents or treating them in place. Source control may be required. Also requires monitoring to determine the effectiveness of the corrective actions.	Applies to groundwater remedial actions.
14	Porter-Cologne Water Quality Control Act (California Water Code Sections 13140-13147, 13172, 13260, 13263, 13267, 13304).	Title 27, CCR, Section 21090	Requires a final cover constructed in accordance with specific prescriptive standards, to be maintained as long as wastes pose a threat to water quality.	Applies to wastes contained or left in place at the end of remedial actions that could affect water quality. Includes closure of landfills and other areas where wastes have been discharged to land.
15	California Safe Drinking Water Act (California Health & Safety Code Section 4010 et seq.)	Title 22, CCR, Section 64400 et seq.	Requirements for public water systems. Includes Maximum Contaminant Levels and Secondary Maximum Contaminant Levels.	The act is legally applicable for an aquifer and associated distribution and pre-treatment system that is currently defined as "public water system" If it is only a potential "public water system," then the act is relevant and appropriate.

March 21, 2013

Attachment 1 - ARARs for Groundwater Remediation

No.	Source	Standard, Requirement, Criterion, or Limitation	Description	Why this is relevant to IR Site 12
16	Staff Report of the RWQCB-CV	"A Compilation of Water Quality Goals"	Provides guidance on selecting numerical values to implement narrative water quality objectives contained in the Basin Plan.	Performance Standard. To be considered in selecting appropriate numerical values to implement the Basin Plan for setting cleanup levels and discharge limits. The numerical values contained in the staff report may be ARAR's, or Performance Standards, depending on the source of the values.
17	Technical Document prepared by RWQCB-SFB Staff	"Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater" (Interim Final – current version)	Provides guidance on selecting numerical values to implement narrative water quality objectives contained in the Basin Plan.	Applies to groundwater remedial actions.
18	California Toxics Rule	40 CFR 131.38	Contains criteria for priority toxic pollutants in the State of California for inland surface waters and enclosed bays and estuaries, except in those waters subject to objectives in the Basin Plan.	Applies to groundwater remedial actions.

Notes and Definition of Abbreviations and Acronyms:

ARAR = Applicable or Relevant and Appropriate Requirement

Basin Plan = Water Quality Control Plan for the San Francisco Bay Basin

CCR = California Code of Regulations

CFR = Code of Federal Regulations

NPDES = National Pollutant Discharge Elimination System

POTW = Publicly-owned treatment works

RWQCB = Regional Water Quality Control Board (any region)

RWQCB-CV = Regional Water Quality Control Board, Central Valley Region

RWQCB-SFB = Regional Water Quality Control Board, San Francisco Bay Region

SWRCB = State Water Resources Control Board